

MULTIPLE MODE OF OPERATION HANDSHAKING BETWEEN DSL MODEMS

ABSTRACT OF THE DISCLOSURE

5           A method for handshaking between DSL modems begins when a central office DSL modem transmits an initiation signal that utilizes a pattern of symbol times to indicate timing and long range handshake mode. When the initiation signal was interpreted to be the C-SYNC signal, the remote DSL modem prepares a response signal that is an R-SYNC signal, an R-TONE signal, or an R-FLAG signal in response to the C-SYNC signal. The central office DSL modem interprets the response signal to determine whether it is the R-SYNC signal, the R-TONE signal, or the R-FLAG signal. When the response signal is the R-SYNC signal, the central office DSL modem provides a C-GALF signal to indicate symbol rate for the synchronous mode of the handshaking to the remote DSL modem. In response to the C-GALF signal, the remote DSL modem provides the R-FLAG signal in accordance with the symbol rate for the synchronous mode of the handshaking. In response to the R-FLAG signal, the central office DSL modem provides a C-FLAG signal in accordance with the symbol rate for the synchronous mode of the handshaking.

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